

## ABSTRACT

A solid-electrolyte secondary battery is provided which comprises a positive electrode, negative electrode and a solid electrolyte provided between the electrodes. The solid electrolyte contains as a matrix polymer a fluorocarbon polymer of 550,000 in weight-average molecular weight (Mw). The fluorocarbon polymer having a weight-average molecular weight of more than 550,000 shows an excellent adhesion to the active material layers of the positive and negative layers. Therefore, the high polymer solid (or gel) electrolyte adheres to the active material layers of the electrodes with a sufficient adhesive strength. From the standpoint of the coating viscosity, a fluorocarbon polymer having a weight-average molecular weight (Mw) over 300,000 and under 550,000.



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(21) 国際出願番号 PCT/JP99/02155  (22) 国際出願日 1999年4月22日(22.04.99)  (30) 優先権データ 特願平10/117509 1998年4月27日(27.04.98) JP  (71) 出願人 (米国を除くすべての指定国について) ソニー株式会社(SONY CORPORATION)[JP/JP] 〒141-0001 東京都品川区北品川6丁目7番35号 Tokyo, (JP) (72) 発明者 ; および (75) 発明者 / 出願人 (米国についてのみ) 畠沢剛信(HATAZAWA, Tsuyonobu)[JP/JP] 毛塚浩一郎(KEZUKA, Koichiro)[JP/JP] 飯嶋由紀子(IIJIMA, Yukiko)[JP/JP] 〒141-0001 東京都品川区北品川6丁目7番35号 ソニー株式会社内 Tokyo, (JP) (74) 代理人 小池 晃, 外(KOIKE, Akira et al.) 〒105-0001 東京都港区虎ノ門二丁目6番4号 第11森ビル Tokyo, (JP)		(81) 指定国 BR, CA, CN, ID, IN, KR, MX, SG, US, 欧州特許 (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE)  添付公開書類 国際調査報告書

(54) Title: SOLID ELECTROLYTIC SECONDARY BATTERY

(54) 発明の名称 固体電解質二次電池

(57) Abstract

A solid electrolytic secondary battery comprising a positive electrode, a negative electrode and a solid electrolyte interposed between the electrodes, wherein the solid electrolyte contains, as matrix polymer, fluorine polymer having a weight-average molecular weight (Mw) of 550,000 or larger, which polymer delivering an excellent adhesiveness to the active material layers of the positive and negative electrodes, thereby enabling a polymer sold electrolyte or a gel electrolyte to be bonded to electrode active material layers with a sufficient adhesive strength. In view of a paint viscosity, fluorine polymer having a weight-average molecular weight (Mw) of not smaller than 300,000 and less than 550,000 may be jointly used.

